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10/593,563

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EXAMINER

COSIMANO, EDWARD R

ART UNIT

PAPER NUMBER

2863

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,563	<b>Applicant(s)</b> CHOUGINARD ET AL.	
	<b>Examiner</b> Edward R. Cosimano	<b>Art Unit</b> 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-28 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/16/2007</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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1. When preparing this Office action the examiner considers the instant application to include:

A) the Oath/Declaration filed on 26 June 2007 which is acceptable to the examiner;

B) the Abstract filed on 20 September 2006 which is acceptable to the examiner;

C) figures 1, 2, 3, 4, 5a, 5b & 6 of the set of drawings containing 3 sheets of 7 figures comprising figures 1, 2, 3, 4, 5a, 5b & 6 as presented in the set of drawings filed on 20 September 2006 where the content of figures 1, 2, 4, 5a, 5b & 6 of the above set of drawings are acceptable to the examiner;

D) the written description as filed on 20 September 2006; and

E) the amended set of claims as filed on 20 September 2006.

2. Applicant's claim for the benefit of an earlier filing date pursuant to 35 U.S.C. 119(e), 35 U.S.C. 120, 35 U.S.C. 365(c) and 35 U.S.C. 371 are acknowledged.

3. The examiner has considered the prior art cited in the base applications.

4. The drawings filed on 20 September 2006 are objected to because:

A) the drawings fail to comply with 37 CFR 1.84(n,o) because they contain unlabeled depictions of features of the invention that are not readily recognizable from the depicted symbol and hence do not aid in the understanding of the drawings or the invention as required by 37 CFR 1.81(a,b). Therefore applicant is required to provide suitable descriptive title legends for the features of the invention designated by:

(1) reference number 312 in figure 3, which as described in the paragraphs between page 9, line 21, and page 12, line 6, is a "computer";

(2) reference number 314 in figure 3, which as described in the paragraphs between page 9, line 21, and page 12, line 6, is a "database";

(3) reference number 316 in figure 3, which as described in the paragraphs between page 9, line 21, and page 12, line 6, is a "reader" or "input device/means";

(4) reference number 320 in figure 3, which as described in the paragraphs between page 9, line 21, and page 12, line 6, is an "instrument" or "object/device" or "tool"; and

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(5) reference number 324 in figure 3, which as described in the paragraphs between page 9, line 21, and page 12, line 6, is a “data/information marking/tag”.

B) the drawings fail to comply with 37 CFR 1.84(p)(5) because they include the following reference legend not mentioned in the written description, note reference legend 322 which has not been mentioned in the written description of figure 3 located in the paragraphs between page 9, line 21, and page 12, line 6, “Fig. 3 shows ... through a communications means.”, and note the corresponding objection to the disclosure.

4.1 Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The disclosure is objected to because of the following informalities:

A) applicant must update the application data with the current status of each reference application note expire provisional application 60/564,963 mentioned at page 1, lines 4-7. Note the suggested change to this paragraph below.

B) the following errors and/or inconsistencies between the drawings filed on 20 September 2006 and the written description have been noted:

(1) if applicant chooses not to delete reference legend 322 from figure 3, note above, then the written description fails to comply with 37 CFR 1.84(p)(5) because the written description does not include an explicit reference to this reference legend in the written description of figure 3 located in the paragraphs

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between page 9, line 21, and page 12, line 6, "Fig. 3 shows ... through a communications means."

(2) the written description lacks an explicit reference to figures 4, 5a & 5b as the features of the invention that are depicted in these figures are described in the written description as required by 37 CFR 1.74. In this regard note the paragraph at page 10, lines 6-9, "The machine ... density marking," which appears to describe figures 4, 5a & 5b, and note the proposed changes to this paragraph below.

C) the disclosure lacks a statement of --We claim:--, as required by Office policy as set forth in MPEP 608.01(m).

D) in view of the above objections it is suggested that the following paragraphs be amended as indicated:

(1) at page 1, lines 4-7:

The present patent application claims priority On United States Provisional Patent Application No. 60/564,963, filed on April 26, 2004, now expired, by the present applicant.

(2) at page 10, lines 6-9:

The machine readable format may be a bar code. The bar code format can be a linear format as shown in Fig. 4 or a 2-dimensional matrix bar code permitting higher data density marking as shown in Figs. 5a and 5b.

5.1 Appropriate correction is required.

6. This application is in condition for allowance except for the following formal matters:

A) see the above objections as set forth above in sections 4 & 5.

6.1 Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

6.2 A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

7. The following is a statement of reasons for the indication of allowable subject matter:

A) the prior art, for example:

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(1) either Houvig (4,303,984) or Hata (4,418,392) or Thong (4,672,306) or Eckardt et al (4,845,649) or Respaut (4,868,476) or McEachern et al (5,089,979) or McBean, Sr (5,347,476 or 5,365,462) or Merrick et al (5,357,953) or McBean (5,375,073 or 5,377,128) or Chader et al (5,617,857) or Morys (5,790,432 or 5,946,641) or French (5,839,094) or Messner et al (5,987,960) or Lalla (6,427,129) or Araya et al (2007/0187240) disclose a machine/process that provides the useful and beneficial function of providing correction or compensation or calibration data/information for an interchangeable machine/process. To provide the correction or compensation or calibration data/information for an interchangeable machine/process, a suitable type of label or tag or memory device with the correct correction or compensation or calibration data/information for the interchangeable machine/process is physically attached or associated with the interchangeable machine/process. Next when the interchangeable machine/process is connected to a machine/process that uses the interchangeable machine/process in order in order to provide the intended function of the interchangeable machine/process, the output data/information provided by the interchangeable machine/process may then be corrected or compensated or calibrated by the attached machine/process, by permitting the attached machine/process to suitably access the correction or compensation or calibration data/information for the interchangeable machine/process that is stored in or on the label or tag or memory device attached to the interchangeable machine/process and then using the stored correction or compensation or calibration data/information for the interchangeable machine/process in order to correct or compensate or calibrate the output data/information from the interchangeable machine/process.

(2) either Barlow et al (4,382,215) or Matsuki et al (JP 62-130160A) or Abbe (6,640,607) disclose a machine/process that provides the useful and beneficial function of calibrating a co-ordinate measuring machine/process in which a series of measurements of a probe relative to a known reference mark are used in order to determine the correct correction or calibration or compensation

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values for the co-ordinate measuring machine/process when using a probe. The determined calibration data/information values for the co-ordinate measuring machine/process are then stored in a suitable memory medium and used in order to correct or calibrate or compensate that measurement data/information produce by the co-ordinate measuring machine/process while the co-ordinate measuring machine/process is using the probe.

(3) Forrer et al (6,347,460) disclose a machine/process that provides the useful and beneficial function of verifying the precision of instruments by periodically testing the instrument against a standard for the instrument.

(4) Lapstun et al (2007/0108285) discloses a machine/process that provides the useful and beneficial function of placing coded data/information about an item/object in or on the item/object.

B) however, the prior art does not fairly teach or suggest in regard to claim 1 a process in claim 1 that provides the useful and beneficial function of fabricating or manufacturing a device useable with a Computer Aided Surgery (CAS) system by providing actions in claim 1 that perform at least the functions of:

(1) fabricating an object or item or device with a tracker that has a known configuration in accordance with the specifications of the object or item or device being fabricated;

(2) obtaining the true actual parameters of the object or item or device that has been fabricated by measuring (a) the object or item or device that has been fabricated, and (b) the relative location of the tracker with respect to the object or item or device that has been fabricated; and

(3) storing the measured true parameters of the object or item or device that has been fabricated in a suitable type of storage medium that is associated with the object or item or device that has been fabricated.

Claims 2-8, which depend from claim 1, are allowable over the prior art for the same reason.

C) however, the prior art does not fairly teach or suggest in regard to claim 9 a machine in claim 9 that provides the useful and beneficial function of calibrating a

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machine/process, for example a Computer Aided Surgery (CAS) system, to use an interchangeable fabricated or manufactured device or item or object that has been fabricated or manufacture to be used with the machine/process or CAS system by providing structures in claim 9 that perform at least the functions of:

(1) obtaining the true actual parameters of the object or item or device that has been fabricated by measuring (a) the object or item or device that has been fabricated, and (b) the relative location of a tracker of known configuration with respect to the object or item or device that has been fabricated;

(2) storing the measured true parameters of the object or item or device that has been fabricated in a suitable type of storage medium that is associated with the object or item or device that has been fabricated;

(3) entering the stored measured true parameters of the object or item or device that has been fabricated into a machine/process, such as a CAS system, that is to use the fabricated object or item or device to perform some function; and

(4) using the entered stored measured true parameters of the object or item or device that has been fabricated in combination with a recognize position of the tracker in order to create or generated a 3 Dimensional (3D) model of the object or item or device that has been fabricated with in a 3D environment.

Claims 10-20, which depend from claim 9, are allowable over the prior art for the same reason.

D) however, the prior art does not fairly teach or suggest in regard to claim 21 a machine in claim 21 that provides the useful and beneficial function of fabricating or manufacturing an interchangeable manufactured device or item or object that has been fabricated or manufacture to be used with the machine/process, such as a Computer Aided Surgery (CAS) system by providing structures in claim 21 that perform at least the functions of:

(1) mounting a tracker of known configuration to an object or item or device that has been fabricated; and

(2) storing in a suitable storage medium associate with the object or item or device that has been fabricated the measured true parameters of the object or



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item or device that has been fabricated along with the relative location of a tracker of known configuration with respect to the object or item or device that has been fabricated.

Claims 22-28, which depend from claim 21, are allowable over the prior art for the same reason.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward R. Cosimano whose telephone number is 571-272-0571. The examiner can normally be reached on 571-272-0571 from 7:30am to 4:00pm (Eastern Time).

8.1 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn, can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8.2 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ERC  
03/30/2009

**/Edward Cosimano/  
Primary Examiner Unit 2863**